This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-164. (canceled)

165. (currently amended) A composition comprising a purified protein which specifically binds ~~a~~ to the gastro-intestinal tract receptor~~, which receptor is selected from the group consisting of~~ HPT1 (SEQ ID NO:178), ~~hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181),~~ wherein the purified protein is bound to a material comprising an active agent selected from the group consisting of an imaging agent, a drug, and an antigen~~, said active agent being of value in the treatment of a mammalian disease or disorder~~, and wherein the protein ~~is selected from the group consisting of~~

~~(a) a protein comprising an~~ comprises the amino acid sequence ~~selected from SEQ ID NOS:1-55~~ of SEQ ID NO:50 or a ~~binding~~ portion thereof of at least 6 contiguous amino acids that mediates binding to HPT1~~;~~

~~(b) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Xaa$_1$ Thr Xaa$_2$ Xaa$_3$ Ser Xaa$_4$ Xaa$_5$ Xaa$_6$ Asn Xaa$_7$ Arg (SEQ ID NO:253), where Xaa$_1$ is Ser or Thr; Xaa$_2$ is Arg or Lys; Xaa$_3$ is Lys or Arg; Xaa$_4$ is Ser or Leu; Xaa$_5$ is Arg, Ile, Val, or Ser; Xaa$_6$ is Ser, Tyr, Phe, or His; and Xaa$_7$ is Pro, His or Arg;~~

~~(c) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Asp Xaa$_1$ Asp Xaa$_2$ Arg Arg Xaa$_3$ Xaa$_4$ (SEQ ID NO:254) where Xaa$_1$ is Ser, Ala, or Gly; Xaa$_2$ is Val or Gln; Xaa$_3$ is Pro, Gly, or Ser; and Xaa$_4$ is Trp or Tyr;~~

~~(d) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Val Arg Ser Gly Cys Gly Xaa$_1$ Xaa$_2$ Ser Ser (SEQ ID NO:255), where Xaa$_1$ is Ala or Phe; and Xaa$_2$ is Arg or His;~~

(e) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: NTRKSSRSNPR (SEQ ID NO:256);

(f) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STKRSLIYNHR (SEQ ID NO:257);

(g) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STGRKVFNRR (SEQ ID NO:258);

(h) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: TNAKHSSHNRR (SEQ ID NO:259);

(i) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DSDVRRPW (SEQ ID NO:260);

(j) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: AADQRRGW (SEQ ID NO:261);

(k) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DGRGGRSY (SEQ ID NO:262);

(l) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: RVRS (SEQ ID NO:263);

(m) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRSGCGFRGSS (SEQ ID NO:264); and

(n) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRGGCGAHSS (SEQ ID NO:265).

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166. (currently amended) The composition of claim 165 wherein the protein comprises ~~an~~ the amino acid sequence of SEQ ID NO:50 ~~selected from the group consisting of SEQ ID NOS:1-55 or a binding portion thereof~~.

167-172. (canceled)

173. (original) The composition of claim 165 wherein the material is a particle containing the active agent.

174. (original) The composition of claim 165 wherein the material is a slow-release device containing the active agent.

175. (original) The composition of claim 165 wherein the active agent is a drug.

176. (currently amended) The composition of any one of claims ~~166~~ 165 and 173-~~175~~ wherein the purified protein is not more than 40 amino acids in length.

177. (currently amended) The composition of any one of claims ~~166~~ 165 and 173-175 wherein the purified protein is not more than 30 amino acids in length.

178. (currently amended) The composition of any one of claims ~~166~~ 165 and 173-175 wherein the purified protein is not more than 20 amino acids in length.

179. (currently amended) The composition of any one of claims 165, 166 and 173-175 wherein said ~~composition~~ protein facilitates the transport of the active agent through human or animal gastro-intestinal tissue.

180. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of the composition of any one of claims 165, 166 and 173-175, and a pharmaceutically acceptable carrier.

181. (currently amended) A composition comprising a chimeric protein wherein the chimeric protein is bound to a material comprising an active agent selected from the group consisting of an imaging agent, a drug, and an antigen ~~of value in the treatment of a mammalian disease or disorder~~, and wherein the chimeric protein comprises (i) an amino acid sequence fused via a covalent bond to (ii) a second amino acid sequence which specifically binds ~~a~~ to the gastro-intestinal tract receptor~~, which receptor is selected from the group~~

~~consisting of~~ HPT1 (SEQ ID NO:178), ~~hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181),~~ and wherein the second amino acid sequence ~~is selected from the group consisting of~~

~~(a) a protein comprising an amino acid sequence selected from SEQ ID NOS:1-55~~ comprises SEQ ID NO:50 or a ~~binding~~ portion thereof of at least 6 contiguous amino acids that mediates binding to HPT1;

~~(b) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Xaa$_1$ Thr Xaa$_2$ Xaa$_3$ Ser Xaa$_4$ Xaa$_5$ Xaa$_6$ Asn Xaa$_7$ Arg (SEQ ID NO:253), where Xaa$_1$ is Ser or Thr; Xaa$_2$ is Arg or Lys; Xaa$_3$ is Lys or Arg; Xaa$_4$ is Ser or Leu; Xaa$_5$ is Arg, Ile, Val, or Ser; Xaa$_6$ is Ser, Tyr, Phe, or His; and Xaa$_7$ is Pro, His or Arg;~~

~~(c) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Asp Xaa$_1$ Asp Xaa$_2$ Arg Arg Xaa$_3$ Xaa$_4$ (SEQ ID NO:254) where Xaa$_1$ is Ser, Ala, or Gly; Xaa$_2$ is Val or Gln; Xaa$_3$ is Pro, Gly, or Ser; and Xaa$_4$ is Trp or Tyr;~~

~~(d) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Val Arg Ser Gly Cys Gly Xaa$_1$ Xaa$_2$ Ser Ser (SEQ ID NO:255), where Xaa$_1$ is Ala or Phe; and Xaa$_2$ is Arg or His;~~

~~(e) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: NTRKSSRSNPR (SEQ ID NO:256);~~

~~(f) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STKRSLIYNHR (SEQ ID NO:257);~~

~~(g) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STGRKVFNRR (SEQ ID NO:258);~~

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~~(h) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: TNAKHSSHNRR (SEQ ID NO:259);~~

~~(i) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DSDVRRPW (SEQ ID NO:260);~~

~~(j) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: AADQRRGW (SEQ ID NO:261);~~

~~(k) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DGRGGRSY (SEQ ID NO:262);~~

~~(l) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: RVRS (SEQ ID NO:263);~~

~~(m) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRSGCGFRGSS (SEQ ID NO:264); and~~

~~(n) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRGGCGAHSS (SEQ ID NO:265)~~.

182. (currently amended) The composition of claim 181 wherein the protein comprises ~~an~~ the amino acid sequence of SEQ ID NO:50 ~~selected from the group consisting of SEQ ID NOS:1-55 or a binding portion thereof~~.

183-188. (canceled)

189. (original) The composition of claim 181 wherein the material is a particle containing the active agent.

190. (original) The composition of claim 181 wherein the material is a slow-release device containing the active agent.

191. (original) The composition of claim 181 wherein the active agent is a drug.

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192. (currently amended) The composition of any one of claims ~~182~~ 181 and ~~189-191~~ wherein the purified protein is not more than 40 amino acids in length.

193. (currently amended) The composition of any one of claims ~~182~~ 181 and ~~189-191~~ wherein the purified protein is not more than 30 amino acids in length.

194. (currently amended) The composition of any one of claims ~~182~~ 181 and ~~189-191~~ wherein the purified protein is not more than 20 amino acids in length.

195. (currently amended) The composition of any one of claims ~~181,~~ ~~182~~ and ~~189-191~~ wherein said ~~composition~~ chimeric protein facilitates the transport of the active agent through human or animal gastro-intestinal tissue.

196. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of the composition of any one of claims ~~181,~~ ~~182~~ and ~~189-191~~, and a pharmaceutically acceptable carrier.

197. (currently amended) A composition comprising a purified protein which specifically binds ~~a~~ to the gastro-intestinal tract receptor~~, which receptor is selected from the group consisting of~~ HPT1 (SEQ ID NO:178), ~~hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181),~~ wherein the purified protein is covalently bound to a drug, said drug being of value in the treatment of a mammalian disease or disorder, and wherein the protein ~~is selected from the group consisting of~~

~~(a) a protein comprising an~~ comprises the amino acid sequence of SEQ ID NO:50 ~~selected from SEQ ID NOS:1-55~~ or a ~~binding~~ portion thereof of at least 6 contiguous amino acids that mediates binding to HPT1;

~~(b) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Xaa$_1$ Thr Xaa$_2$ Xaa$_3$ Ser Xaa$_4$ Xaa$_5$ Xaa$_6$ Asn Xaa$_7$ Arg (SEQ ID NO:253), where Xaa$_1$ is Ser or Thr; Xaa$_2$ is Arg or Lys; Xaa$_3$ is Lys or Arg; Xaa$_4$ is Ser or Leu; Xaa$_5$ is Arg, Ile, Val, or Ser; Xaa$_6$ is Ser, Tyr, Phe, or His; and Xaa$_7$ is Pro, His or Arg;~~

~~(c) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid~~

~~sequence of: Asp Xaa$_1$ Asp Xaa$_2$ Arg Arg Xaa$_3$ Xaa$_4$ (SEQ ID NO:254) where Xaa$_1$ is Ser, Ala, or Gly; Xaa$_2$ is Val or Gln; Xaa$_3$ is Pro, Gly, or Ser; and Xaa$_4$ is Trp or Tyr;~~

~~(d) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Val Arg Ser Gly Cys Gly Xaa$_1$ Xaa$_2$ Ser Ser (SEQ ID NO:255), where Xaa$_1$ is Ala or Phe; and Xaa$_2$ is Arg or His;~~

~~(e) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: NTRKSSRSNPR (SEQ ID NO:256);~~

~~(f) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STKRSLIYNHR (SEQ ID NO:257);~~

~~(g) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STGRKVFNRR (SEQ ID NO:258);~~

~~(h) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: TNAKHSSHNRR (SEQ ID NO:259);~~

~~(i) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DSDVRRPW (SEQ ID NO:260);~~

~~(j) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: AADQRRGW (SEQ ID NO:261);~~

~~(k) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DGRGGRSY (SEQ ID NO:262);~~

~~(l) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: RVRS (SEQ ID NO:263);~~

~~(m) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRSGCGFRGSS (SEQ ID NO:264); and~~

~~(n) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRGGCGAHSS (SEQ ID NO:265).~~

22 198. (currently amended) The composition of claim 197 wherein the protein comprises ~~an~~ the amino acid sequence of SEQ ID NO:50 ~~selected from the group consisting of SEQ ID NOS:1-55 or a binding portion thereof~~.

199-204. (canceled)

23 205. (currently amended) The composition of claim 197 ~~any one of claims 198-204~~ wherein the purified protein is not more than 40 amino acids in length.

24 206. (currently amended) The composition of claim 197 ~~any one of claims 198-204~~ wherein the purified protein is not more than 30 amino acids in length.

25 207. (currently amended) The composition of claim 197 ~~any one of claims 198-204~~ wherein the purified protein is not more than 20 amino acids in length.

26 208. (currently amended) The composition of claim 197 or 198 ~~any one of claims 198-204~~ wherein said ~~composition~~ protein facilitates the transport of the active agent through human or animal gastro-intestinal tissue.

27 209. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of the composition of claims 197 or 198 ~~any one of claims 198-204~~, and a pharmaceutically acceptable carrier.

28 210. (currently amended) A composition comprising a purified protein which specifically binds ~~a~~ to the gastro-intestinal tract receptor~~, which receptor is selected from the group consisting of~~ HPT1 (SEQ ID NO:178), ~~hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181),~~ wherein the purified protein is coated onto or absorbed onto or covalently bonded to the surface of a nanoparticle or microparticle, and wherein the protein ~~is selected from the group consisting of~~

~~(a) a protein comprising an~~ comprises the amino acid sequence of SEQ ID NO:50 ~~selected from SEQ ID NOS:1-55~~ or a ~~binding~~ portion thereof of at least 6 contiguous amino acids that mediates binding to HPT1;

~~(b) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Xaa$_1$ Thr Xaa$_2$ Xaa$_3$ Ser Xaa$_4$ Xaa$_5$ Xaa$_6$ Asn Xaa$_7$ Arg (SEQ ID NO:253), where Xaa$_1$ is Ser or Thr; Xaa$_2$ is Arg or Lys; Xaa$_3$ is Lys or Arg; Xaa$_4$ is Ser or Leu; Xaa$_5$ is Arg, Ile, Val, or Ser; Xaa$_6$ is Ser, Tyr, Phe, or His; and Xaa$_7$ is Pro, His or Arg;~~

~~(c) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Asp Xaa$_1$ Asp Xaa$_2$ Arg Arg Xaa$_3$ Xaa$_4$ (SEQ ID NO:254) where Xaa$_1$ is Ser, Ala, or Gly; Xaa$_2$ is Val or Gln; Xaa$_3$ is Pro, Gly, or Ser; and Xaa$_4$ is Trp or Tyr;~~

~~(d) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Val Arg Ser Gly Cys Gly Xaa$_1$ Xaa$_2$ Ser Ser (SEQ ID NO:255), where Xaa$_1$ is Ala or Phe; and Xaa$_2$ is Arg or His;~~

~~(e) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: NTRKSSRSNPR (SEQ ID NO:256);~~

~~(f) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STKRSLIYNHR (SEQ ID NO:257);~~

~~(g) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STGRKVFNRR (SEQ ID NO:258);~~

~~(h) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: TNAKHSSHNRR (SEQ ID NO:259);~~

~~(i) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DSDVRRPW (SEQ ID NO:260);~~

~~(j) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: AADQRRGW (SEQ ID NO:261);~~

~~(k) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DGRGGRSY (SEQ ID NO:262);~~

~~(l) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: RVRS (SEQ ID NO:263);~~

~~(m) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRSGCGFRGSS (SEQ ID NO:264); and~~

~~(n) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRGGCGAHSS (SEQ ID NO:265)~~.

211. (currently amended) The composition of claim 210 wherein the protein comprises ~~an~~ the amino acid sequence of SEQ ID NO:50 ~~selected from the group consisting of SEQ ID NOS:1-55 or a binding portion thereof~~.

212-217. (canceled)

218. (original) The composition of claim 210 wherein the nanoparticle or microparticle contains a drug.

219. (original) The composition of claim 210 wherein the nanoparticle or microparticle is a slow-release device.

220. (currently amended) The composition of any one of claims ~~211~~ 210, 218, and 219 wherein the purified protein is not more than 40 amino acids in length.

221. (currently amended) The composition of any one of claims ~~211~~ 210, 218, and 219 wherein the purified protein is not more than 30 amino acids in length.

222. (currently amended) The composition of any one of claims ~~211~~ 210, 218, and 219 wherein the purified protein is not more than 20 amino acids in length.

223. (currently amended) The composition of any one of claims ~~211~~ 210, 218, and 219 wherein said ~~composition~~ protein facilitates the transport of the active agent through human or animal gastro-intestinal tissue.

224. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of the composition of any one of claims ~~211~~ 210, 211, 218 and 219, and a pharmaceutically acceptable carrier.

225. (currently amended) A nanoparticle or a microparticle ~~formed from~~ comprising a purified protein which specifically binds ~~a~~ to the gastro-intestinal tract receptor~~,~~ ~~which receptor is selected from the group consisting of~~ HPT1 (SEQ ID NO:178), ~~hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181),~~ wherein the purified protein ~~is selected from the group consisting of~~

~~(a) a protein comprising an~~ comprises the amino acid sequence of SEQ ID NO:50 ~~selected from SEQ ID NOS:1-55~~ or a ~~binding~~ portion thereof of at least 6 contiguous amino acids that mediates binding to HPT1;

~~(b) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Xaa$_1$ Thr Xaa$_2$ Xaa$_3$ Ser Xaa$_4$ Xaa$_5$ Xaa$_6$ Asn Xaa$_7$ Arg (SEQ ID NO:253), where Xaa$_1$ is Ser or Thr; Xaa$_2$ is Arg or Lys; Xaa$_3$ is Lys or Arg; Xaa$_4$ is Ser or Leu; Xaa$_5$ is Arg, Ile, Val, or Ser; Xaa$_6$ is Ser, Tyr, Phe, or His; and Xaa$_7$ is Pro, His or Arg;~~

~~(c) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Asp Xaa$_1$ Asp Xaa$_2$ Arg Arg Xaa$_3$ Xaa$_4$ (SEQ ID NO:254) where Xaa$_1$ is Ser, Ala, or Gly; Xaa$_2$ is Val or Gln; Xaa$_3$ is Pro, Gly, or Ser; and Xaa$_4$ is Trp or Tyr;~~

(d) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Val Arg Ser Gly Cys Gly Xaa_1 Xaa_2 Ser Ser (SEQ ID NO:255), where Xaa_1 is Ala or Phe; and Xaa_2 is Arg or His;

(e) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: NTRKSSRSNPR (SEQ ID NO:256);

(f) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STKRSLIYNHR (SEQ ID NO:257);

(g) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: STGRKVFNRR (SEQ ID NO:258);

(h) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: TNAKHSSHNRR (SEQ ID NO:259);

(i) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DSDVRRPW (SEQ ID NO:260);

(j) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: AADQRRGW (SEQ ID NO:261);

(k) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DGRGGRSY (SEQ ID NO:262);

(l) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: RVRS (SEQ ID NO:263);

(m) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRSGCGFRGSS (SEQ ID NO:264); and

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~~(n) a protein which is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: SVRGGCGAHSS (SEQ ID NO:265).~~

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226. (currently amended) The composition of claim 37 225 wherein the protein comprises ~~an~~ the amino acid sequence of SEQ ID NO:50 ~~selected from the group consisting of SEQ ID NOS:1-55 or a binding portion thereof~~.

227-232. (canceled)

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233. The composition of ~~any one of claims 226-232~~ claim 37 225 wherein the purified protein is not more than 40 amino acids in length.

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234. The composition of ~~any one of claims 226-232~~ claim 37 225 wherein the purified protein is not more than 30 amino acids in length.

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235. The composition of ~~any one of claims 226-232~~ claim 37 225 wherein the purified protein is not more than 20 amino acids in length.

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236. The composition of ~~any one of claims 226-232~~ claim 37 225 or 38 226 wherein said ~~composition~~ protein facilitates the transport of the active agent through human or animal gastro-intestinal tissue.

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237. A pharmaceutical composition comprising a therapeutically effective amount of the composition of ~~any one of claims 226-232~~ claim 37 225 or 38 226, and a pharmaceutical acceptable carrier.

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238. A pharmaceutical composition comprising a therapeutically effective amount of a chimeric protein comprising (i) a first protein comprising at least 6 contiguous amino acids of an amino acid sequence comprising SEQ ID NO:50 ~~selected from the group consisting of SEQ ID NOS:1-55~~, said contiguous amino acids being capable of specifically binding to ~~a~~ the gastro-intestinal tract receptor ~~selected from the group consisting of~~ HPT1 (SEQ ID NO:178), ~~hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181),~~ said first protein being fused via a covalent bond to (ii) a second protein, said second protein being a drug; and a pharmaceutical acceptable carrier.

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239. A pharmaceutical composition comprising a therapeutically effective amount of a nucleic acid encoding a chimeric protein comprising (i) a first protein comprising at least 6 contiguous amino acids of an amino acid sequence comprising SEQ ID NO:50 ~~selected from the group consisting of SEQ ID NOS:1-55~~, said contiguous amino acids capable of specifically binding to ~~a~~ the gastro-intestinal tract receptor ~~selected from the group consisting of~~ HPT1 (SEQ ID NO:178), ~~hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181),~~ said first protein being fused via a covalent bond to (ii) a second protein, said second protein being a drug; and a pharmaceutically acceptable carrier.

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